

4. Circulation Element DRAFT

The Circulation Element deals with the physical infrastructure of transportation, including the streets, bikeway and pedestrian networks. It also deals with the programming and operation of the circulation system, such as rideshare programs and the operation of transportation systems.

Authority

The Circulation Element is authorized in Government Code Section 65302(b) that states that the General Plan is required to include:

“A Circulation Element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element of the plan.”

The statute specifically identifies public utilities and facilities as components of the Circulation Element but permits jurisdictions to organize elements in a manner appropriate to the community. The Portola General Plan addresses the public infrastructure, including sewer, water, energy, and utilities, in the Public Facilities and Infrastructure Element.

Relationship to Other General Plan Elements

Circulation and land use are closely linked elements that provide the framework for much of the General Plan. The location and intensity of land uses determines the need for circulation system components and, in turn, the capacity of the circulation system often determines the location and feasibility of land use. In combination with land use, the circulation system may affect air quality, plant and animal habitats, environmental noise, energy use, community appearance and other environmental considerations.

Coordination between the Land Use Element and the Circulation Element:

- encourages walking and bicycle trips by promoting a compact urban form with neighborhood destinations close to residents;
- makes public transit feasible through coordination of the intensity and location of land uses; and
- reduces the length and number of vehicle trips outside of the community by promoting mixed-use development and by providing employment centers, shopping and services within the City.

Relationship to Regional Transportation Programs

The circulation system in the City is linked to the circulation network in Plumas County and beyond. Planning for future circulation improvements must address the existing and planned roads, bikeways, and transportation services that extend beyond the City. This Circulation Element is intended to be compatible with the Regional Transportation Plan for Plumas County, 2020, and as periodically updated.

Background

The comprehensive goal and vision of the City's Circulation Element is to ensure Santa Barbara is a city in which alternative forms of transportation and mobility are so available and attractive, that use of an automobile is a choice rather than a necessity. The City's Circulation Element was adopted in 1997, with a number of new goals, policies, and implementation actions added in 2011 as part of the General Plan update process, including several 2011 General Plan Certified FPEIR mitigation measures. Per Government Code §65302(b), the Circulation Element consists of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, military airports and ports, and other local public utilities and facilities, all correlated with the Land Use Element. The 2011 goals, policies, and implementation actions are not considered a substantial update to the Circulation Element, but, together with the 1997 goals, policies, and implementation actions, they do comply with the California Complete Streets Act of 2008. Table 3 shows the result of comparing the City's 2011/1997 Circulation Element to the 2017 Completeness Checklist.

Completeness Checklist & Required Contents

California Government Code Section	Brief Description of Requirement	Addressed in General Plan
	General location and extent of existing and proposed:	
65302(b)(1)	Major thoroughfares	√
65302(b)(1)	Transportation routes	√
65302(b)(2)	Public Transportation	√
65302(b)(2)	Bicycle	√
65302(b)(2)	Pedestrian	√
65302(b)(2)	Automobile	√
65302(b)(2)	Commercial goods	√
65302(b)(1)	Existing and proposed terminals (i.e. airport, train station, bus station)	N/A
65302(b)(1)	Military airports and ports	N/A
65302(b)(1)	Other local public utilities and facilities (i.e. water, sewer, stormwater systems, telecommunications and broadband, electric vehicle charging stations, electricity, and natural gas lines)	√
65302(b)(2)	Needs of children, persons with disabilities, and seniors	√
65302(b)(1)	Identified funding for infrastructure	√
65302(b)(1)	Correlated with Land Use Element	√

Items remaining to update

- General description of new technologies
- General description and mapping of electric vehicle charging stations and other alternative fuel infrastructure.
- Identify funding sources
- Update maps to show transit, bicycle and pedestrian infrastructure
- Update w/ trail map, linkages to circulation
- Update maps to identify major destinations in the City

Land Use

The Land Use Element establishes the physical framework for development in Portola. It defines the location, use characteristics, and intensity of land uses throughout the city. It is crucial that the Circulation Element and the Land Use Element are consistent and that the Circulation Element allows for the implementation of the Land Use Element. The General Plan Land Use Map includes land use designations that allow for the new roads in the Core Area as designated on the Circulation Element. Conversely, the Circulation Element includes goals, policies, and implementation measures that implement the Land Use Element. See Figure 4-7, New Roads in the Core Area from the Circulation Element.

Key Circulation Issues

Individual Independence

Flexibility and personal independence are characteristics of the existing circulation system. People are accustomed to using personal automobiles to travel at will. The circulation system must retain this level of independence, but also seek to include alternatives that will reduce reliance on automobiles as the primary mode of transportation.

Economic Development

The circulation system will play a significant role in fulfilling the tourism and economic development goals established in this General Plan. The system must provide clear and convenient access for tourists, visitors, and travelers along Highway 70. Elements of the circulation system, such as the improved bike paths, the mountain bike trails, a local shuttle system and the rail road, not only serve a transportation need, but may also be an attraction to visitors.

Tourism and regional service businesses will be a growing component of the local economy. The circulation system must provide convenient access for business patrons in the form of parking and direct access routes. For the tourists, the circulation system must not only provide access, but should also become an attraction by providing special travel modes and experiences. In order to successfully serve tourists, the circulation system must be easy to navigate to points of interest, and must provide short-term parking and local transportation.

The circulation system can enhance the potential for economic development in the City by providing transport for goods and services and by providing convenient travel for workers to jobs. Within the City and the neighboring areas the emphasis is on making the trip to work convenient and safe, and facilitating alternatives to the single occupant automobile.

Local economic growth can also occur through local residents working outside the community. Commuter bus services, ride sharing and other measures that enhance the opportunity to work outside the community can indirectly enhance the local economy in the short term by raising the income of residents. However, in the long term, a large percentage of out commuting workers will diminish the potential growth of the local economy. The ultimate objective is to establish a strong local economy that relies on a resident work force employed in the City and neighboring area. Refer to Section 2.6 in the Land Use Element for additional discussion of the jobs and housing balance in the City.

Time Horizon

Perhaps more than other elements in the General Plan, the Circulation Element must take a very long term view. Physical infrastructure, such as the road system, establishes a framework that is very difficult to alter. Land uses may change and buildings be torn down and reconstructed, but the route of the public streets and utility corridors are typically fixed in place over time. Therefore, the circulation system components must be carefully considered for their long-term impacts on land use and community form. Moreover, many major infrastructure components, such as a bridge crossing or major new road, are relatively expensive and must be planned long in advance in order to accrue sufficient funding. For these reasons, the Circulation Element, particularly that portion addressing major infrastructure improvements, must look beyond the twenty-year horizon typical of other elements in the General Plan.

Safety

Safety is a fundamental goal for all components of the circulation system. Conventional design standards typically address the safety requirements for streets, bicycle paths, and pedestrian networks. However, Portola has specific needs that require special attention to safety concerns. These include the need to design safe routes for evacuation in emergencies, and the special design considerations for streets and bike and pedestrian paths in mountainous, winter conditions. The special conditions in Portola also relate to the intent to accommodate a mix of bicycles, pedestrians, and vehicles of various types. Special conditions also will occur when the City is the site of special events that accommodate large numbers of visitors.

Multi-modal System

The circulation system will be more efficient and will provide better flexibility and conveniences if all modes of transportation are coordinated. This means that different modes connect at central locations where people can easily transfer from one mode to another. An example would be to establish a transit center where a regional bus, a park-and-ride lot, a local shuttle, a jitney or cab service, a primary pedestrian path, and a primary bicycle path can all connect. The different modes must also be coordinated in time so that the connections are convenient.

Cost Effective

Travel and movement of goods and utilities requires expenditures of money, energy, and time. An efficient circulation system serves to minimize these expenditures by reducing the need for travel, and by reducing the time and distance of necessary travel. Reduction of travel can be accomplished by clustering travel destinations (retail, services, schools, and so on) close to the residents' home so that walking or public transportation is feasible. The Land Use Element where the land uses that attract traffic are clustered in a compact urban form that will facilitate the use of public transportation and walking.

An efficient circulation system will also help to reduce the expenditure of public funds for new construction through design that reduces the length and width of roads to the minimum actual requirement. The General Plan Land Use Element will help minimize the need for new infrastructure expenditures by maximizing the use of, and by directing new development to the existing roads.

Energy Efficiency

Fuel required for transportation is a significant energy demand in any community. Relatively low fuel costs have enabled expansion of substantial development throughout California. However, small, relatively remote communities such as Portola are particularly vulnerable to increases in fuel costs. Fuel costs typically tend to be higher in such communities, and if fuel prices increase, as is likely over the next two decades, the effect can seriously hinder economic stability and development. Higher energy (fuel) costs will demand more of individual household incomes for typical daily travel, and may make it uneconomic to travel to jobs outside the area, therefore, residents may be forced to relocate. The use of ride sharing and other trip reduction methods will reduce dependence on increasingly expensive fuels. The policies in this Circulation Element encourage trip reduction methods as a means to reduce dependence on expensive fuels before they become prohibitively expensive and diminish the economic potential and quality of daily life in Portola.

Higher fuel costs may also diminish the level of services as businesses and suppliers find it uneconomical to deliver goods and services to the area. Finally, and perhaps most serious, is the potential loss in tourism as people reduce their travel due to the high cost of fuel. Fuel prices will be determined far beyond the influence of this City, but the General Plan must seek to minimize the vulnerability to energy costs by developing alternative modes of travel within the City and facilitating alternative means for tourists to travel to the area.

Impact on Natural Features

The circulation system must include design standards that minimize the physical effect of circulation improvements on the natural environment, and the need to design systems that are safe and functional in the winter.

Air Quality

Unlike many urban places, vehicle traffic has not been the primary source of air pollution in Portola. However, the climate conditions that create the winter air pollution problem indicate the potential for increased pollution within and near the City. Measures designed to minimize reliance on vehicles are necessary to reduce the potential for air pollution increases in the community.

Circulation Goals

The goals for the circulation system reflect the broader the goals of this General Plan. These include improvement of the existing community, economic development, expanded tourism, aesthetic quality in the built environment, public and personal safety, and environmental protection.

Goal C-1.	Upgrade all existing streets to current improvement standards.
Goal C-2.	Extend the circulation network, including streets, bike and pedestrian paths, and transit routes to in-fill areas and new growth areas in a manner that is energy and cost efficient, safe, and minimizes impact on the natural environment.
Goal C-3.	Improve the circulation network, including streets and parking, rail, transit, and pedestrian paths to enhance economic development and tourism.
Goal C-4.	Expand transportation alternatives within the City, including public transit, walking and bicycling.
Goal C-5.	Expand the circulation system to accommodate and attract new businesses and visitors (tourists).

Level of Service Standards

The effectiveness of the streets to carry traffic is measured by a standard evaluation criterion, the Level of Service (LOS). Traffic engineers use LOS as a quantitative measure to describe traffic conditions, and as a means of evaluating future traffic conditions.

Level of Service is a measure of the existing or projected traffic compared to the theoretical capacity of the street or intersection to safely accommodate traffic. Factors taken into consideration include volume of traffic, street and intersection design, signal timing, and other variables. Each LOS is assigned a letter, ranging from "A" (less than a 5 second wait at intersections and no restrictions on speed along arterials) to "F" (delays of more than one green cycle at intersections and "stop and go" movement along the street). LOS is normally used to describe the morning or afternoon peak-hour conditions when traffic is the heaviest. Table 4-1 describes the Level of Service categories.

The LOS criteria are useful aids in identifying potential problems with street capacity, and the land uses that generate traffic. However, LOS is a generalized evaluation tool and must be tempered by interpretation of local conditions. For instance, minor adjustments in the timing of a traffic signal, adding turning lanes, limiting the points of access from adjacent properties and other modifications can improve the actual operation of a given street or intersection.

The current traffic conditions in Portola do not normally approach the levels experienced in more urban areas. Most existing streets and intersections in Portola operate well within the range of LOS C or better, although the Plumas County Regional Transportation Plan (2000) identifies SR 70 (Sierra Street) within the City operating at LOS D during peak traffic conditions. The Caltrans "Guide for the Preparation of Traffic Impact Studies" (Guide) states that Caltrans endeavors to maintain a target LOS C on State Highway facilities. The Guide is consulted when State Highways are affected.

Street Network and Classification

The street system in Portola consists of three general classes of street:

- local, small scale streets that serve the residential neighborhoods;
- local, rural roads that serve the low density residential areas; and
- larger collector and arterial streets.

Much of the existing street system was built before private automobiles came into common use. The streets follow a grid pattern established when the City was originally platted in 1909. The grid does not relate to the topography and many streets stop at a ravine or steep slope. This results in discontinuous streets in portions of the older City. These areas were subdivided into individual lots, but have no streets or other public improvements to serve those lots. The street pattern developed outside the original grid pattern is typically circuitous and follows the natural terrain. At the perimeter of the City the grid pattern transitions to an informal pattern of rural streets flanked by larger lots.

The street system was not designed to accommodate modern traffic, or to park cars on residential lots. The narrow, residential lots found on older streets typically do not have sufficient width for a driveway, and on-street parking and snow removal are not

convenient. The streets are laid out in short blocks only 350 feet long by 300 feet wide. This enables people to walk in relatively direct routes within the City, but it requires a substantial amount of land to be paved, and is not practical in steep terrain.

The majority of the 14 miles in the Portola road system existed at the time the City incorporated in 1946. This includes .55 miles of paved major collector street, 4.43 miles of paved minor collector street and 15.92 miles of paved local streets, as shown in Figure 4-1. Minor arterial streets are important routes for intra-county regional circulation. In Plumas County, the minor arterial circulation system consists of all State Routes including: SR 70, 89, 36, 147, 49, and 284. Only SR 70 (Sierra Street) directly affects Portola.

SR 70 (Sierra Street) is the primary street through the City. The highway has a 100 foot right of way through the center of the City, but flares to 120 foot wide right-of-way at the east of the City and 160 foot wide right of way to the west. The highway was widened to four lanes in 1997 with full curb, gutter and side walk along portions of the street. Curb, gutter, and sidewalk improvements were not installed where the highway abuts a driveway or parking apron. The back of the sidewalk abuts the property boundary and fronts individual buildings in some locations. On-street parking occurs where there is a curb, and in those locations there is no room for additional parking in front of buildings.

Major collector streets provide greater access to more localized destinations for regional circulation. These streets typically are designed to provide access for regional traffic between the State Routes. In Portola, only West Street (Lake Davis Road) is designated by the County Regional Transportation Plan as a major collector.

Minor collector streets provide additional access to local attractions for regional traffic and serve as local collectors for the residential street system. The County Regional Transportation Plan identifies Beckwourth Street, Gulling Street, Commercial Street, First Avenue, Fourth Avenue, Sixth Avenue, Pacific Street, Main Street, and County Road A-15 as the primary collector streets in the existing street system. Traffic within and outside the City cause these streets to function as collectors although they have the standard 60-foot wide right-of-way found on all City streets.

Table 4-1
Traffic Level of Service Conditions

Level of Service	Traffic Flow Conditions	Maximum Volume to Capacity Ratio
A	Conditions of free flow, speed is controlled by driver's desires, stipulated road speed limits, or physical roadway conditions.	60%
B	Conditions of stable flow; operating speeds beginning to be restricted; little or no restrictions on maneuverability from other vehicles	70%
C	Conditions of stable flow; speeds and maneuverability more closely restricted; occasional backups behind left turning vehicles at intersections.	80%
D	Conditions approach unstable flow; tolerable speeds can be maintained but temporary restrictions may cause extensive delays; little freedom to maneuver; comfort and convenience low.	90%
E	Conditions approach capacity; unstable flow with stoppages of momentary duration; maneuverability severely limited.	100%
F	Forced flow conditions; stoppages for long periods; low operating speeds. Delays at intersections average 60 seconds or more.	more than 100%

Street Conditions

A study of existing street conditions (Bastian Engineering, November 19, 1998) indicates that several older streets are in need of repair due to deteriorating sub base, deteriorating pavement, and other serious conditions. These streets will require upgrading in order to maintain a minimum standard of maintenance. In addition, many street sections were never constructed and remain unimproved. Many other streets exceed 6% grade and are difficult to travel during snow and ice conditions. The streets in need of repair are shown in Figure 4-2.

Repair or reconstruction of these streets is essential to maintain the current level of service and to avoid significant on-going maintenance costs. A fundamental objective of the Circulation Element is to upgrade the existing streets to current standards and to extend the unimproved streets in the in-fill areas described in the Land Use Element, notably Section 2-6.

Street Standards

Extension of local streets to serve new development in the areas at the perimeter of the City requires design standards and street patterns that are more responsive to the terrain and environmental conditions. These street standards may be different from the existing streets in the older parts of the City. The new streets will typically extend into forested areas that are somewhat steeper than the developed portion of the City. Therefore, the street system needs to be more flexible, both in alignment and street width than the historic street standards.

Each classification of City street is designed to standards appropriate to the conditions and intended use. In general, the standards use the minimum level of street cross-section needed for traffic safety and emergency access and evacuation. The intent is to minimize grading and the amount of land paved for streets. In addition to requiring less grading and paving, narrower streets will tend to slow traffic, and may indirectly discourage vehicle use. Where combined with a convenient and safe pedestrian route, narrow streets will encourage residents to walk rather than drive. Beyond fundamental traffic safety concerns, street design should emphasize ease of maintenance, ease of snow removal, simplicity of construction, visual character, and pedestrian access. Ease of maintenance suggests a relatively narrow paved section and simple rolled curb and gutter, or no gutter in rural settings, rather than the more formal standing curb.

Street standards for various conditions existing or expected to occur in Portola are summarized in Table 4-2.

Figure 4-1
Existing Major Streets

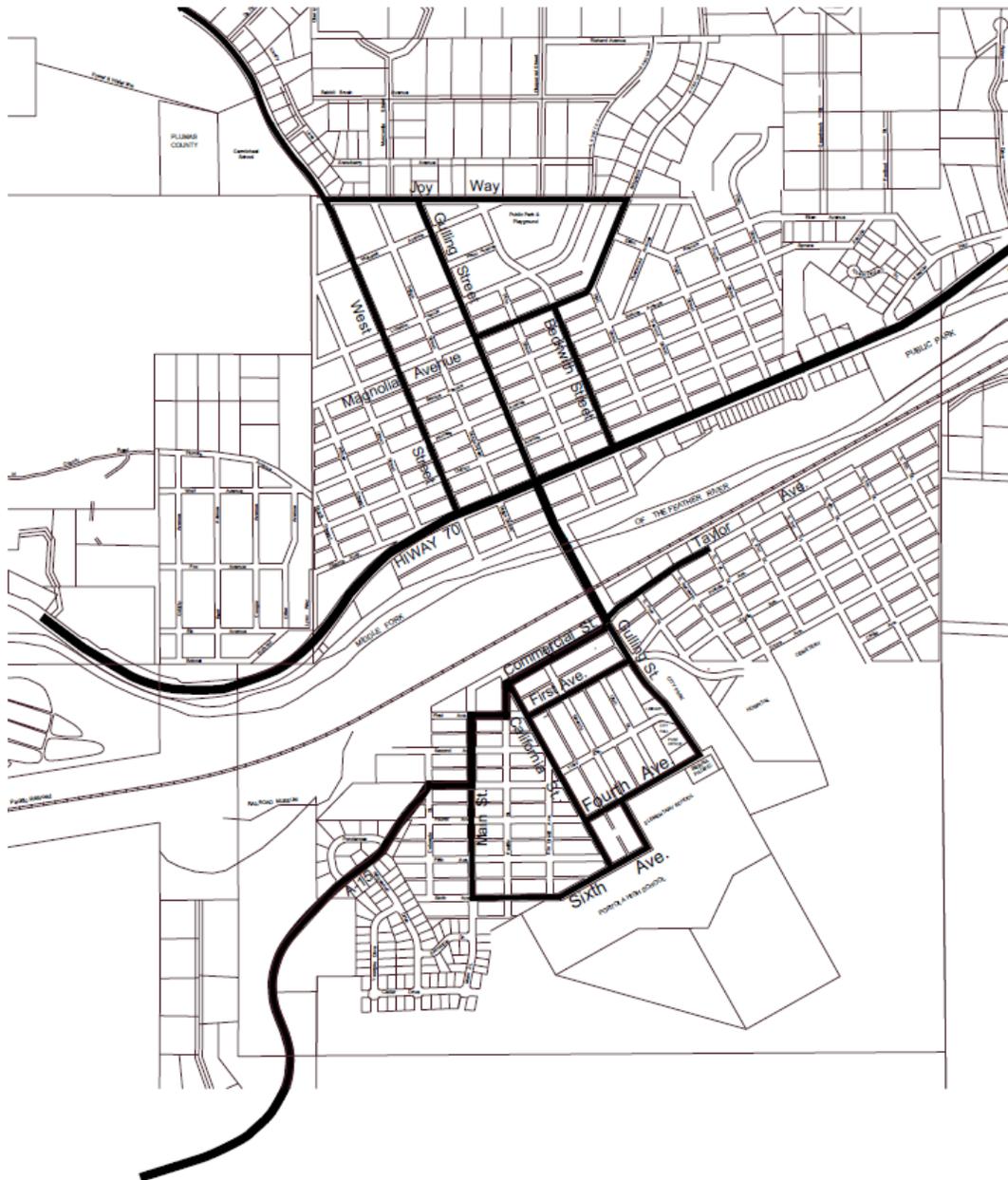
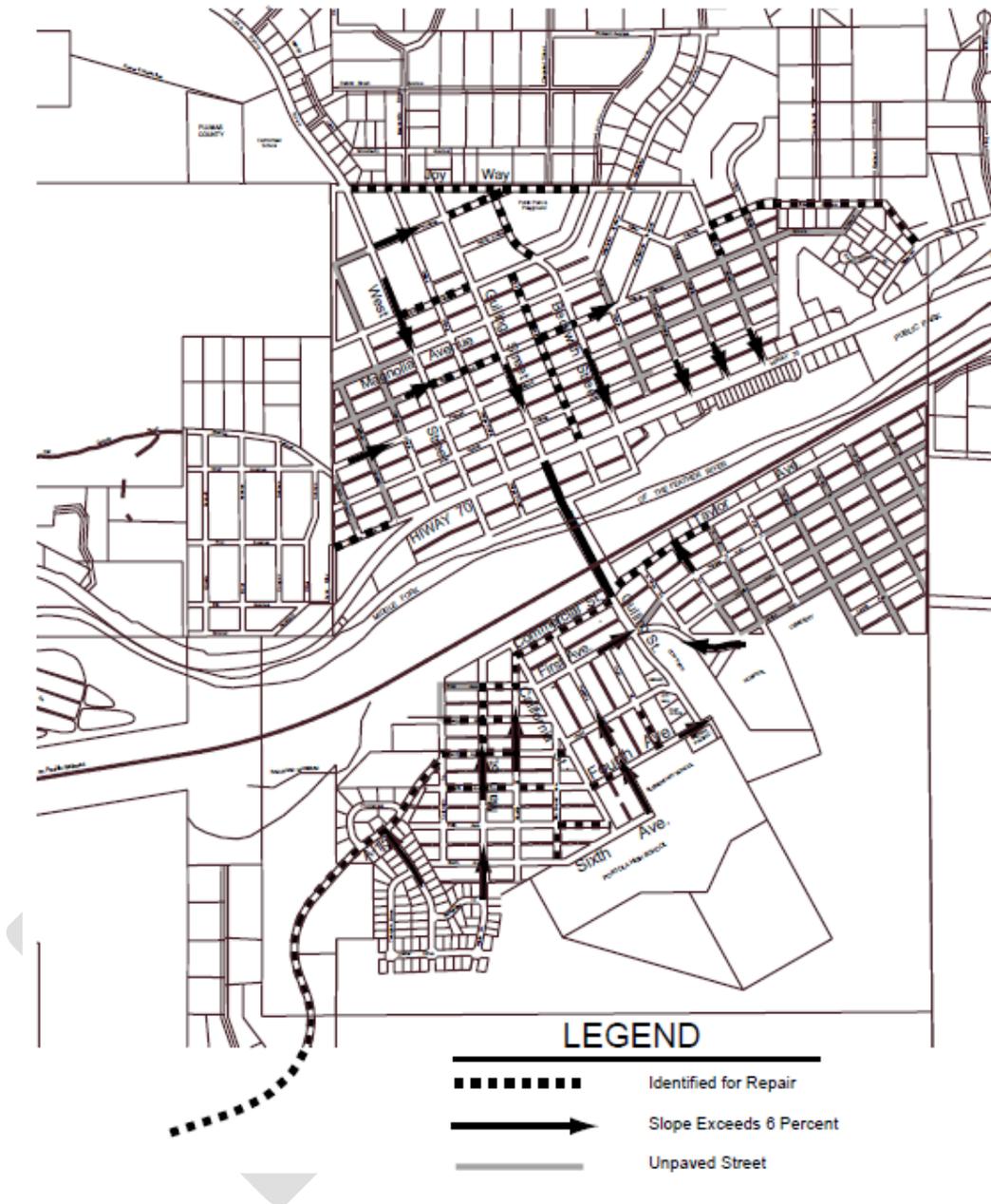


Figure 4-2
Existing Streets in Need of Repair or New Construction



Minor Arterial and Collector Streets

The level of new residential and employment growth anticipated in the General Plan Land Use Element will not lead to urban type development experienced in many other communities. Consequently, the volume of traffic associated with major arterial streets in urban areas is not anticipated. There will be a need for streets capable of carrying traffic at volumes and speeds greater than acceptable in typical residential areas. Therefore,

arterial and collector street standards are planned to accommodate these higher demand levels should they occur as the community grows. Cross-section diagrams of the minor arterial street and the collector street classification are shown in Figures 4-3 and 4-4 respectively.

Urban Residential Streets

The typical street in residential neighborhoods must be sufficiently wide to carry local traffic at relatively slow speeds (25 m.p.h. or less). The street should allow for on street parking and a public sidewalk. The streets should be designed to facilitate snow removal and storage. A cross-section diagram of the urban residential street is shown in Figure 4-5.

Low Density Residential Streets

Extensions of local streets to serve new development areas require design standards and street patterns that respond to the terrain and environmental conditions. The new streets will typically extend into forested areas that are somewhat steeper than the developed portions of Portola. Therefore, the street system needs to more flexible than the existing street standards, both in alignment and street width. A cross-section diagram of the low density residential street is shown in Figure 4-6.

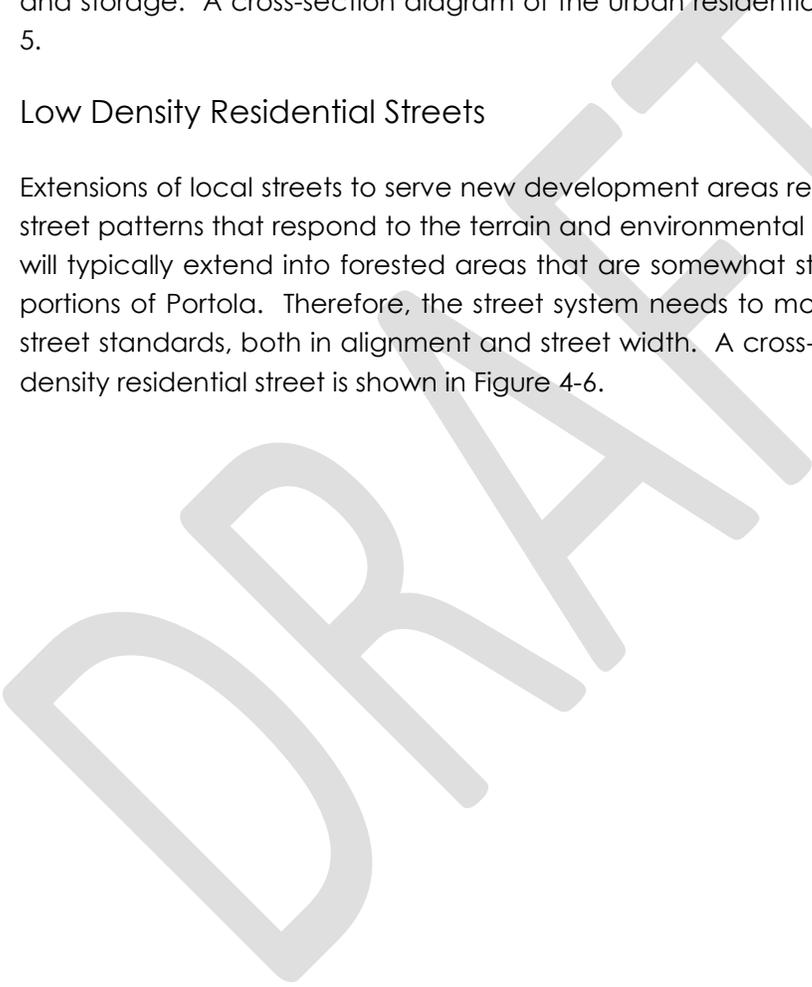


Table 4-2
Summary of City Street Classification

	Low Density Residential Lane	Urban Residential Street	Collector Street	Minor Arterial Street
Purpose	Rural street serving less than 150 dwelling units.	Urban street serving less than 500 dwelling units.	Collector street serving more than 500 dwelling units, and commercial uses.	Arterial providing a major through route.
Design capacity	Less than 1500 ADT	Less than 5000 ADT.	Less than 5000 ADT	5000 to 7500 ADT
Right-of-way	44 ft.	52 ft.	60 ft.	60 ft.
Travel lanes	2	2	2	2
Center Turn lane	none	none	none	yes
Travel Way pavement Width	20 ft.	24 ft.	24 ft.	varies (24 ft. to 36 ft.)
Pavement Width Including Parking or Bike Lane	20 ft.	34 ft.	32 ft.	40 ft.
Total Shoulder Width (each side)	4 ft.	9 ft.	14 ft.	4 ft.
Bikeway	none	Class 3	Class 3	Class 2
Curb and Gutter	none	yes	yes	yes
Sidewalk	none	yes	yes	yes
Parking Permitted	no	yes	yes	yes

ADT = Average Daily Traffic



Figure 4-3
Minor Arterial Street

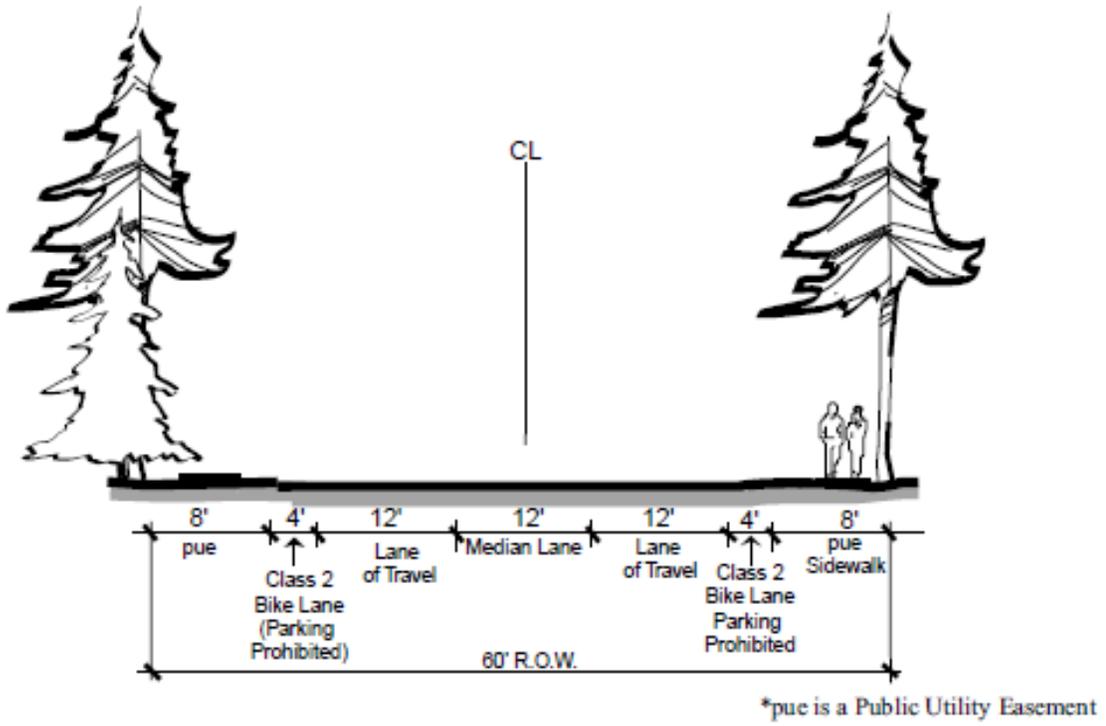


Figure 4-4
Collector Street

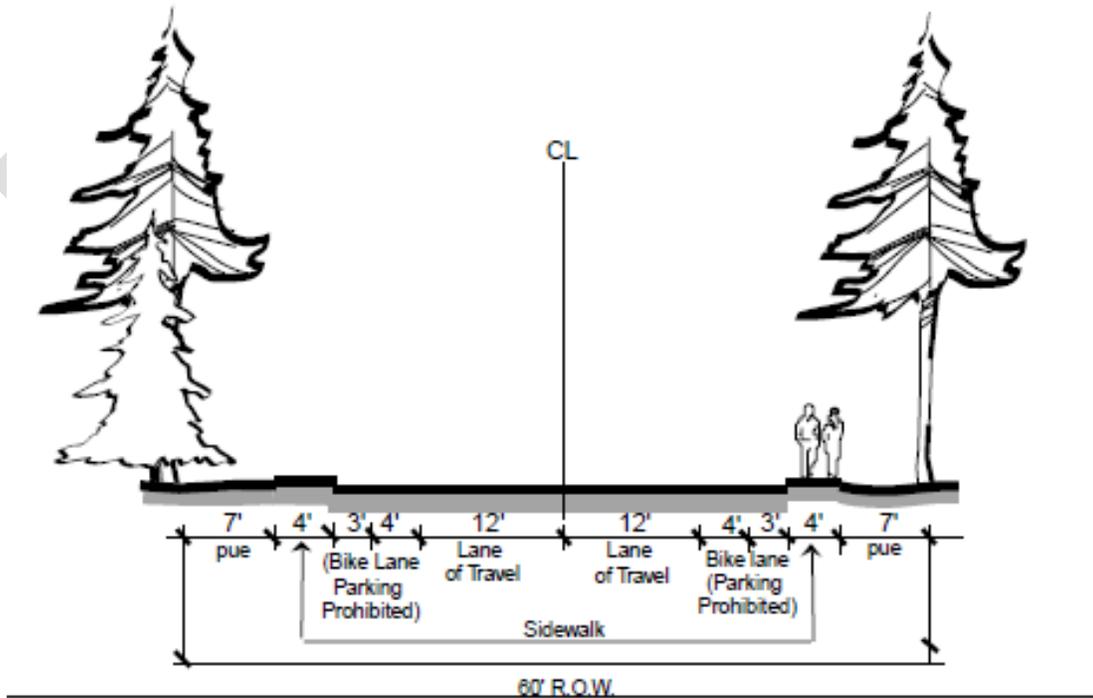


Figure 4-5
Urban Residential Street

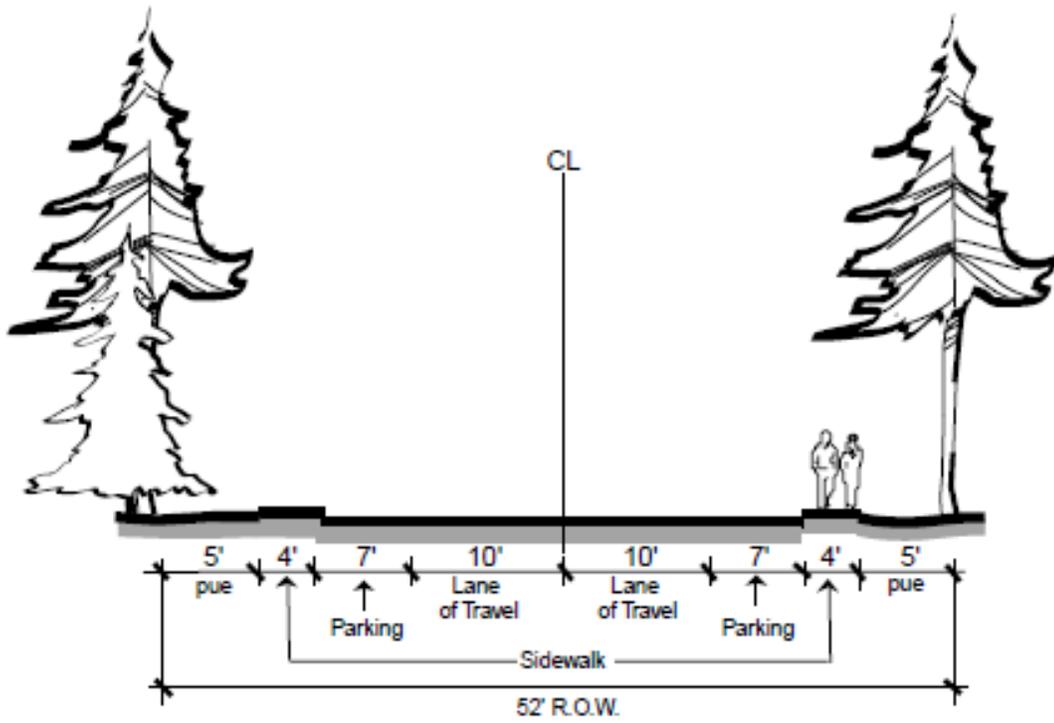
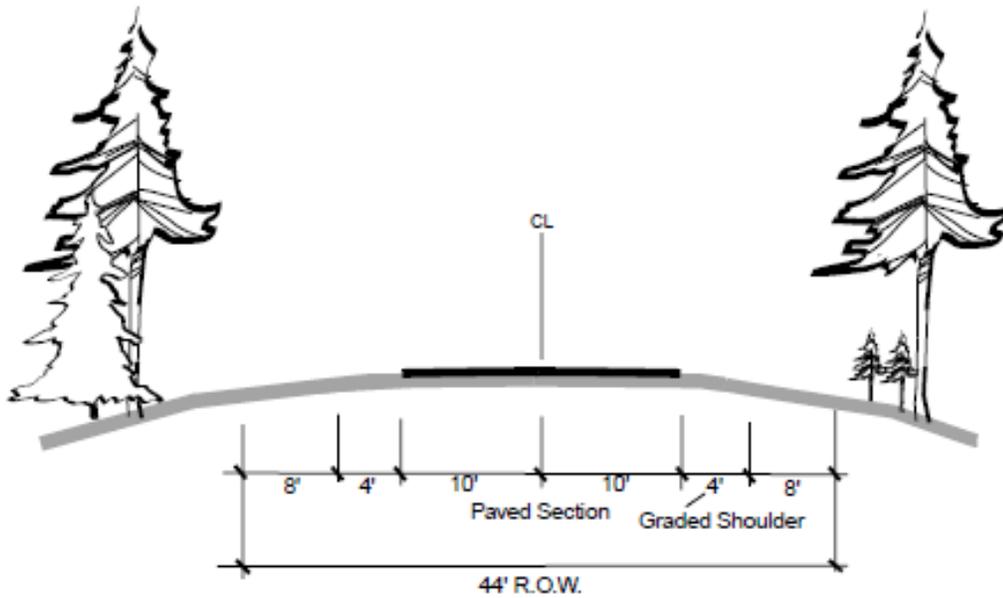


Figure 4-6
Low Density Residential Street



Traffic Calming

Traffic speed is a concern where local and collector streets are relatively straight and there are few intersections. Within the developed portions of the City, in residential and school areas, and where there are pedestrian crossings or sidewalks along the street, it is desirable to slow traffic to safe speeds. This is accomplished through "traffic calming" measures. These may include signalized or signed intersections, roundabouts and traffic circles, and other physical improvements that cause drivers to slow and be more aware of other vehicles and pedestrian or bicycle traffic.

Major Streets Master Plan

The Major Street Master Plan defines the framework of major streets. It is intended that the City retain the existing compact form. In-fill development is encouraged in the Land Use Element as a significant means of accommodating new growth. Consequently, selected existing streets will continue to function as the major streets. Nonetheless, there are potential growth areas within and adjacent to the existing City boundary that will require major new roads where development is permitted.

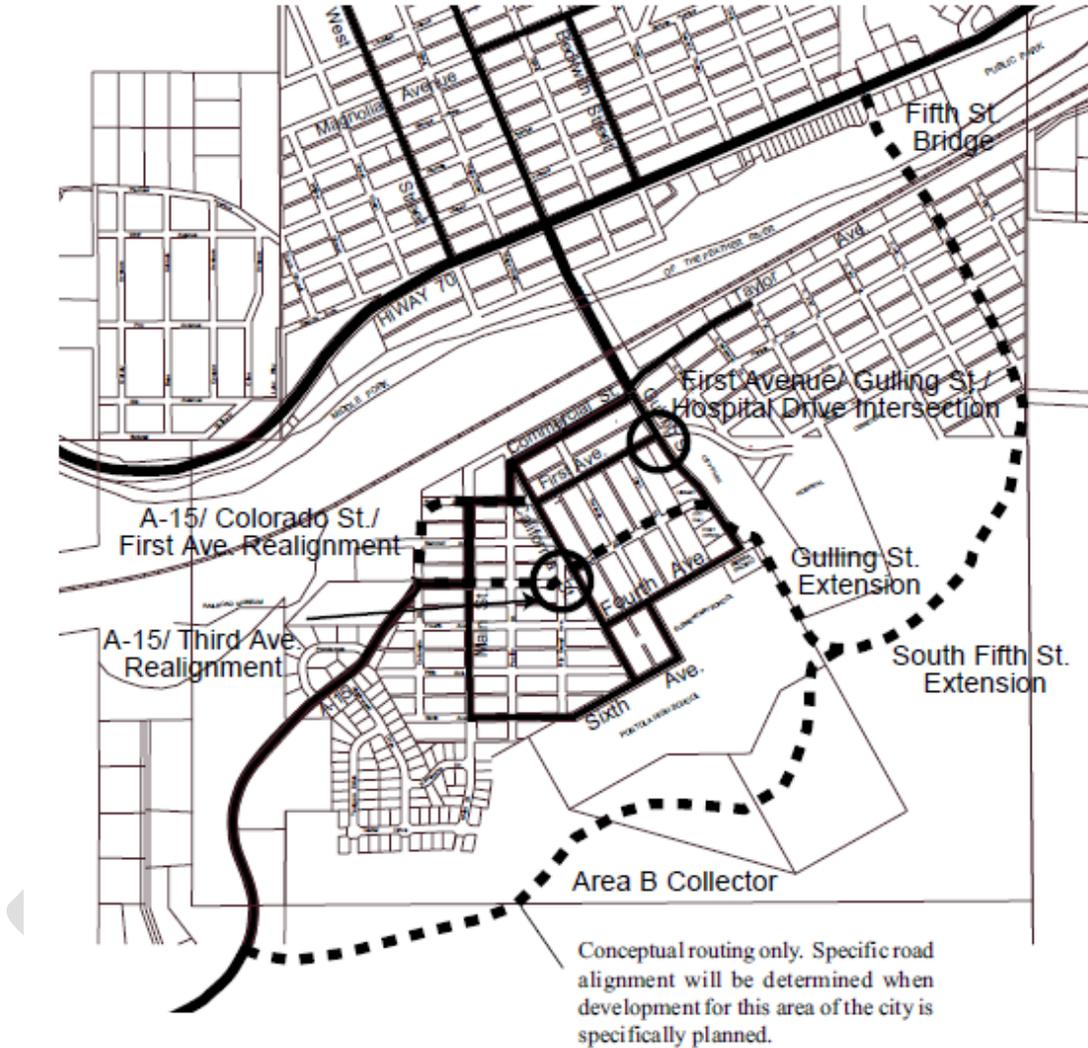
New Arterial Streets and Collector Streets

Development in the areas north and south of the existing urban area, as well as in-fill development, will generate the need for additional routes parallel and connecting to Highway 70. The conceptual routes are described here and are shown on Figure 4-7. The intent is to provide collector streets through the potential major new development areas identified in the General Plan Diagram.

County Road A-15/Colorado Street/First Avenue Realignment is intended to route traffic from County Road A-15 to Gulling Street. A-15 may be realigned north along a newly constructed Colorado Street and will curve onto a new alignment of First Avenue through the vacant parcel. The realignment will provide a new route to the Railroad Museum and access to parking along the north side of First Avenue to serve the commercial uses on Commercial Street. Commercial Street will continue to be a public street for traffic, but may be designed to accommodate wider pedestrian sidewalks and slower, lower volume vehicle traffic. This is consistent with the intent to make Commercial Street a pedestrian oriented service and shopping street, as described in the Land Use Element Section 2.6.1 and the Community Design Element Section 3.1. This proposed realignment is not meant to discourage any repaving/reconstruction of the road.

First Avenue/Gulling Street/Hospital Drive Intersection will be reconstructed to raise the intersection and lower the grade along First Avenue. The existing right-of-way for Portola Avenue between south Pine Street and Gulling Street will be declared surplus and made available to the adjacent property owners. This reconstruction will facilitate the use of First Avenue as the primary route to Road A-15.

Figure 4-7
New Roads in the Core Area



South Gulling Street will extend south into Area B and provide a connection to the proposed business park and residential area, and the new collector street connecting South Fifth Street to County Road A-15.

South Fifth Street will be extended south and west around the hospital to connect Taylor Street to the proposed Gulling Street extension. Ultimately, South Fifth Street may be extended across the river on a new bridge connecting to Sierra Street. This will provide a new entry to the south side of the City.

Area B Collector will be a new street that extends west from the Gulling Street extension around the south side of the high school and connects to County Road A-15. This will provide a connection from County Road A-15 to the Gulling Street extension and ultimately to the South Fifth Street extension.

Major Streets in Future Growth Areas

Annexation of new growth areas will require new routes to provide local circulation both parallel and connecting to Highway 70. The primary movements will be north and west of Highway 70.

West Street/ Delleker Collector will connect from West Street in the vicinity of Carmichael School west to an extension of Delleker Drive north from Highway 70.

Delleker Drive will extend north to connect to the West Street/Delleker Drive Collector.

West Meadow Loop will extend west from Delleker Drive and connect to Highway 70 in the vicinity of Mabie.

Future development of the area to the north of the existing City boundary, notably the Teanna Ranch and Grizzly Creek Road area will require additional roads. Generally these roads will serve relatively low density development and will be reviewed and approved with future development.

Traffic Signals

With the relatively low traffic volumes on most local streets throughout Portola traffic signals have not been needed. However, the volume of traffic on Highway 70 (Sierra Street) does require signalization at the Gulling Street intersection. Additional signalization may be required in the future as traffic volumes increase.

Truck Routes

Highway 70 will remain the primary route for commercial traffic through the City and is intended to accommodate adequate movement of goods by trucking. Truck traffic on all other collector streets will be limited to local deliveries.

Circulation Policies and Implementation

Policies: Street System

- C-P-1:** Maintain traffic Level of Service LOS C on residential streets, arterial and collector streets and at all intersections.
- C-P-2:** Make efficient use of existing street facilities and complete the street systems in the underdeveloped portions of the City as they are developed.
- C-P-3:** When there is increased demand from new development, the street system will be expanded to serve new development areas.
- C-P-4:** New development will pay a fair share of the costs of street and other traffic and transportation improvements based on the traffic generated and impacts on service levels.
- C-P-5:** New streets will be designed and graded to have minimum impact on natural features.
- C-P-6:** The road system must provide for evacuation of residents, access, and tactical locations for fire fighters, and defensible space around structures. The residential streets in new development areas shall be designed to provide a clear evacuation route. The primary evacuation route shall be reasonably direct and streets shall flow toward safety in a logical fashion.
- C-P-7:** All roads must be designed to minimize hazards from snow and ice conditions and facilitate snow plowing.
- C-P-8:** Street improvements will be designed to minimize traffic patterns that will increase air pollution.

Implementation: Street System

- C-I-1:** Conduct a traffic analysis on all development proposals for residential development in excess of 50 residential units and commercial development in excess of 10,000 square feet to evaluate the effect on LOS standards. This requirement may be waived by the City where a recent traffic analysis considered the impact of the proposed project. Caltrans "Guide for the Preparation of Traffic Impact Studies" will be consulted when SR 70 is affected.

- C-I-2:** Perform periodic evaluation of the LOS on major streets to identify deterioration in LOS conditions.
- C-I-3:** Evaluate LOS conditions when prioritizing local street improvements for the City.
- C-I-4:** Improve local streets and intersections to maintain LOS standards.
- C-I-5:** Require new development to participate in the funding of collector and arterial street improvements identified in the Master Street Plan.
- C-I-6:** Adopt street standards that provide flexibility in design with regard to topography and sensitive environmental conditions, and land use intensity.
- C-I-7:** All new residential subdivisions with over ten (10) residential lots shall provide an emergency evacuation plan with the tentative subdivision map. The evacuation plan shall indicate a primary and secondary evacuation route for each residential lot.
- C-I-8:** Establish a street improvement priority program to implement street construction in the in-fill areas.
- C-I-9:** Require that the arterial and collector streets shown on Figure 4-3 are considered in the review of any development proposal adjacent to the proposed route.

Parking

Parking is unusually challenging in Portola because the City streets were designed before automobiles were common. Typically the streets are wide enough to allow on-street parking, but there is little dedicated off-street parking in the commercial areas, and no parking on the residential lots in the older parts of the City.

The demand for parking generated by the existing businesses is periodically increased significantly by the patrons of special events. New business development and increases in tourism, including special events, is a fundamental purpose in this General Plan. The success of the economic development element will rely, in part, on the ability to accommodate the traffic and parking associated with new businesses and special events. Other modes of transportation, including local shuttles, bus service, and pedestrian and bike systems can be expected to reduce the traffic and parking load associated with special events, but the majority of visitors will arrive in automobiles.

Policies: Parking

- C-P-13:** Ensure that there is adequate parking for normal commercial activities.
- C-P-14:** Ensure that there is adequate parking for special events.
- C-P-15:** Coordinate the parking area locations with the roadway, transit, and pedestrian and bikeway systems.
- C-P-16:** Expand public parking in the Sierra Street and Commercial Street area to alleviate existing parking shortages.

Implementation: Parking

- C-I-13:** Work with the local merchants to improve on-street parking conditions.
- C-I-15:** Support formation of parking districts to support local merchants.
- C-I-16:** Encourage development of shared parking among local businesses. Allow common access driveways to shared off-street parking.
- C-I-17:** Locate parking within acceptable walking distance of the facilities they are expected to serve. Walking distances should not exceed 200 feet for short-term parking and 600 feet for long-term parking.
- C-I-18:** Locate parking facilities for special events along routes that facilitate walking to the event, and in locations that can be logically served by a shuttle system.
- C-I-19:** Locate parking facilities for special events near transportation nodes.
- C-I-21:** Locate parking for recreation activities such as hiking and mountain biking riding near the trailhead.

Bikeway and Pedestrian System

Portola is a compact community with most public destinations within reasonable walking distance of the majority of residents. The town is approximately one mile in length along Sierra Street and neighborhoods extend approximately one mile north and south from Sierra Street. City Hall, the library, post office, major parks, and sheriff substation are clustered together just a few blocks from the old town commercial area. The high school and middle school are located at the edge of the south neighborhood, and the

elementary school and a neighborhood park are located at the edge of the north neighborhood.

The existing City is very walkable in terms of the location of primary land uses. The existing street pattern throughout the older parts of the City typically consists of very short blocks 350 feet long. This facilitates walking, but creates multiple intersections and an excessive amount of paving. The major limitation to ease of walking is the lack of sidewalks. Sidewalks occur sporadically in the residential neighborhoods outside the commercial areas.

The relatively direct routes afforded by the existing street pattern facilitate bicycle travel in Portola. However, cycling is constrained by the lack of designated bike routes and the condition of local streets. Steep streets and, in some cases, unpaved lanes and/or shoulders make it difficult to bicycle throughout the City. Cycling is particularly difficult in winter when ice on the steeper streets and snow piled along the shoulders adds to the hazard.

Sierra Street is a barrier to both pedestrians and cyclists due to the width of the street, the relatively high speed and volume of traffic, and the lack of designated and signalized crossings. The installation of a traffic signal at the intersection of Sierra Street and Gulling Street in 2002 will improve this condition, but additional designated crossings are needed.

Improving the facilities for bicycling is important for the convenience and enjoyment of Portola residents, and for expanding economic development through tourism. The area around Portola offers significant opportunities for touring and mountain bike riding. Portola is the crossroads of regional bike routes designated in the Regional Transportation Plan. Primary routes extend from the City up Rocky Point Road and Grizzly Creek Road to Lake Davis and return by Lake Davis Road. A second route extends out County Road A-15 to Highway 89, then returns via Graeagle and Blairsden along Highway 70. Several additional routes extend from these primary routes to provide touring cyclists with a range of trips that can be based in Portola.

Portola can become a hub for such activity if it provides the base facilities to serve these potential patrons of local businesses and events. The primary facilities required are staging areas and good routes to the trails and touring routes outside the City.

The existing bikeway and pedestrian network should be enhanced to further encourage bicycling and walking in the City. This is accomplished in part by encouraging the continuity of the existing compact land use pattern in the Land Use Element, and by creation of new bike routes and sidewalks wherever new streets are installed or existing streets are upgraded.

In addition to the existing pedestrian network the General Plan establishes a new pedestrian system designed to link major activity and recreation centers. These centers are part of the land use and recreation facilities intended to enhance the quality of life

for community residents, and to attract tourism as part of the economic development strategy described in the Economic Development Element.

The backbone of this pedestrian system is the walkway and bikeway that links the Federal Park land with Railroad Museum. The trail will be part of the planned “Riverwalk Park” located along the north side of the river connecting the Federal Park to the Gulling Street Bridge. From Gulling Street, the walk continues up Commercial Street then to the Railroad Museum. The path will be marked with 1/10-mile markers and signs identifying it as the Riverwalk trail.

One of the primary constraints to bicycle travel is the narrow pavement section on the Gulling Street Bridge. The pavement is only 28 feet wide and would permit a four-foot wide bike lane on both sides only if the travel lanes are reduced to 10 feet. A dedicated bike route will require additional width on the bridge.

Similarly, the width of Commercial Street limits the potential for a bike lane and on street parking on both sides of the street.

Policies: Bikeway and Pedestrian System

- C-P-20:** Develop a system of sidewalks and bikeways that promote safe walking and bicycle riding for both residents and tourists.
- C-P-21:** Establish a primary pedestrian system linking the Federal Park land with the Railroad Museum via Commercial Street.
- C-P-23:** Provide spur or branch walkways connecting to the residential neighborhoods and primary public destinations.
- C-P-24:** Route sidewalks so that they connect to major public parking areas, transit stops, and intersections with the bikeway system.
- C-P-25:** Provide pedestrian links to hiking trails in the area around the City.
- C-P-26:** Provide adequate bicycle parking facilities at commercial, business/professional, and light industrial uses.
- C-P-27:** Improve safety conditions, efficiency, and comfort for bicyclists, transit riders, and pedestrians, while ensuring compliance with Americans with Disabilities Act (ADA) requirements.
 - Use steps to avoid steeper grades on sidewalks.
 - Give the walks a minimum cross pitch of approximately 2 percent.
 - Locate important walkways and intersections where they will not be in prolonged shade.

Implementation: Bikeway and Pedestrian System

- C-I-22:** Install prominent signs at the east and west entries to the City on Sierra Street warning motorists of the presence of pedestrians and bicyclists.
- C-I-23:** Develop a design for improvement and re-striping of Gulling Street Bridge to accommodate, at minimum, a Class II bike path in both directions.
- C-I-24:** Seek funding to expand the width of the Gulling Street Bridge to accommodate a bike path in each direction and provide access to the open space area along the south side of the river.
- C-I-25:** Seek funding to provide a pedestrian/bike bridge across the river connecting a bike and pedestrian path on the south side of the river to the Riverwalk Park on the north side.
- C-I-28:** Add bike lanes whenever possible in conjunction with road reconstruction or re-striping projects and subdivision development and related off-site improvements.
- C-I-29:** Acquire the right-of-way for the bike and pedestrian path along the north side of the river linking the Gulling Street Bridge to the Federal Park (the Riverwalk Bike Trail).
- C-I-30:** Seek funding from the US Forest Service to connect the Riverwalk Bike Trail through the Federal Park to Rocky Point Road.
- C-I-31:** Make bikeway improvements an on-going funding objective by:
- Continuing to consider financing bikeway design and construction as part of the City's annual construction and improvement budget.
 - Incorporating bikeway improvements as part of a five year Capital Improvements Plan.
 - Pursuing grant funding and other sources for new bikeways.
 - Pursuing funding for ancillary facilities such as river access for handicapped persons, secured bicycle parking, parking areas at mountain bike and touring bike trail heads, drinking fountains and restrooms.
- C-I-32:** Require provision of secure covered bicycle parking at all parks and public gathering places, multifamily residential, commercial, industrial and office/institutional uses.

- C-I-33:** Encourage Plumas County Transit to provide bike racks on the buses serving the Portola community. Provide bike racks on a local shuttle service or jitneys used for special events.
- C-I-34:** Encourage resident and tourist use of the bike trail system by preparing a map of the bikeways and trail heads within and near the City.
- C-I-35:** Ensure that City standards for pedestrian facility design conform to the Americans with Disabilities Act (ADA) requirements. Implement a program to install handicapped ramps at all intersections as street improvements are being installed. Intersections in the core area along Sierra Street, Gulling Street, and Commercial Street shall have priority for funding the handicap accessibility improvements.

Transportation System Management

Transportation System Management (TSM) refers to measures designed to reduce the number and length of automobile trips, particularly during peak commute hours. TSM measures typically include ride sharing, van pools, and a variety of management techniques applied by larger employers in metropolitan areas. Typical TSM measures are most effective where they can be implemented by large employers.

In rural communities where there is a significant number of workers commuting out to a larger metropolitan area the TSM measures focus on ride sharing and van pooling to reduce the number of single occupant vehicle trips. Reduced vehicle travel can help reduce peak hour traffic congestion, reduce future air pollution concentrations, and reduce consumption of energy for transportation uses. Moreover, it can help reduce individual transportation costs for Portola residents, yielding potentially significant savings as the cost of fuel rises.

TSM measures can also be effective in reducing the number of vehicle trips resulting from special events. TSM measures can include special bus service or shuttles to bring visitors in from distant locations.

Policies: Transportation System Management

- C-P-28:** Encourage a program to provide ride sharing and van pool opportunities for Portola residents.
- C-P-29:** Use alternative modes of transportation to bring visitors to special events.

Implementation: Transportation System Management

- C-I-38:** The City shall work with the County and Caltrans to locate a park and ride lot at the east edge of the City to facilitate ride sharing.
- C-I-40:** The City shall make information available at City Hall and the library regarding public transit, ridesharing, van pools, and other transportation alternatives to single occupant vehicles.

Public Transportation

General public transportation within Plumas County is provided by Plumas County Transit. They operate three buses on fixed routes, with dial-a-ride service available. Plumas County Transit is funded primarily by Local Transportation Funds and State Transit Assistance Funds, allocated on an annual basis through the Plumas County Transportation Commission. One bus begins in Portola and provides three round trips throughout Portola and to Graeagle, Blairsden, Cromberg, and Quincy. Plumas County Nutrition Center also provides transportation to Senior Citizens for a variety of purposes including, but not limited to: meal delivery, medical appointments, and shopping.

In addition to the County transit service, Greyhound bus service is provided along Highway 70 on a daily basis.

The ridership on public transit in rural areas is typically quite low due to the relatively small population base and low density of residential development. However, there are factors that indicate the potential need for expanded transit service in Portola. The planned population growth and the residential densities shown in the Land Use Element in the core of the City will contribute to the demand for public transit service. The City includes uses that are typically attractions for bus ridership, such as the hospital, library, post office, shopping, and services along Sierra Street and Commercial Street. The schools are also a potential service area.

A small, locally operated shuttle or jitney would provide the services within town and connect to the Plumas County Transit system. A local shuttle or jitney service would provide an alternative transportation mode within the City for visitors to special events such as Railroad Days, craft fairs, cultural and sporting events.

Policies: Public Transit

- C-P-30:** Cooperate with Plumas County Transit to enhance the public transit ridership in Portola.
- C-P-31:** Seek opportunities to provide an alternative public transit system in Portola.

- C-P-32:** Establish a goal for public transit in Portola that will be associated with the recreation and tourism opportunities in the community.
- C-P-33:** Seek to establish a regional public transportation link.
- C-P-35:** Ensure that public transit services are linked to public parking areas, bikeways, and major pedestrian routes.

Implementation: Public Transit

- C-I-41:** Work with Plumas County Transit to provide bus stop shelters at all locations within the City. The bus stop shall include a sign that indicates the route and schedule of the bus. The bus stop shelter shall include a sign that clearly identifies it and provides the name of the stop.
- C-I-42:** Provide information about the transit service at the City Hall and library.
- C-I-44:** Establish a plan of primary locations where the transit systems will connect to the major bikeways and pedestrian ways and the primary public parking areas.
- C-I-45:** Work with the regional commercial carriers to establish bus service to the City.
- C-I-46:** Work with the regional commercial carriers to establish a station where patrons can be protected from weather and package shipping and receiving service is available.
- C-I-47:** Designate a location for the regional bus station where it serves as a "multi-modal" station with connections to the regional bus, the Plumas County Transit bus, a public parking lot, local shuttle system and primary bikeway and pedestrian system will all interconnect.
- C-I-48:** Establish guidelines for development of a Special Event Shuttle service and work with private businesses and service agencies to initiate a shuttle service during special events.
- C-I-49:** Monitor the use of special event shuttles and consider expanding to seasonal or year-round shuttle if the demand warrants it.
- C-I-50:** Work with other communities, recreation, and lodging businesses to expand the local seasonal shuttle or special event shuttle to the Feather River Inn, Blairsden, Johnsville, Graeagle, the Grizzly Creek camp and other activity destinations in the east Plumas County area.

- C-I-51:** Work with Plumas County to ensure that paratransit and other special needs are met in the City of Portola.

Rail

The Union Pacific Railroad is a dominant element in the physical form of the City, but plays only a minimal role in local transportation. The rail line is totally dedicated to freight and the local service is limited to shipping and receiving. Nonetheless, the rail through the Feather River Canyon is a major trans-Sierra route and recognized as one of the more scenic. Although passenger service was discontinued in the 1970's the route is still used occasionally for special passenger trains. Passenger rail service is growing after a long period of decline and new passenger service is slowly being re-established. The California State Rail Plan identifies Portola as a major railyard and connection to Nevada and states to the east for rail freight movement.

The decision to institute passenger service occurs far beyond the City's influence. Yet, the City can encourage the restoration of passenger service, even on a limited, periodic basis. The rail museum is an obvious draw that will bring rail enthusiasts to the City. The City can help support the interest in rail travel by sponsoring events that draw people who enjoy riding on the railroad, and by ensuring that rail travel is a convenient and comfortable experience when stopping in Portola.

Guiding Policies: Rail

- C-P-36:** Encourage Union Pacific Railroad to provide passenger service on the Feather River route at every opportunity with the ultimate goal of re-establishing regularly scheduled service.
- C-P-37:** Encourage Union Pacific Railroad to sustain the rail shipping service.

Implementation: Rail

- C-I-52:** Cooperate with the Portola Railroad Museum in their efforts to provide visitor facilities in Portola.
- C-I-53:** Zone land use near the visitor facilities to accommodate lodging, restaurants, retail shops, and other services in support of visitors to the rail museum.
- C-I-54:** Route the local shuttle system or other transportation networks under the City's control to provide convenient access for visitors to the rail museum, and for visitors arriving by rail.

- C-I-55:** Include directional signs to the rail museum in appropriate locations on any master directional signage program established by the City.
- C-I-56:** Establish a working relationship between the City administration and the local management of the Union Pacific Railroad by requesting regular meetings to discuss items of common interest regarding expansion of rail service and economic development of the region.

Airport

The Beckwourth (Nervino) Airport is a county owned and operated facility located approximately five miles east of Portola along Highway 70. The airport provides services for general aviation on a 4,600 foot long runway capable of accommodating large general aviation aircraft.

Although not within the City, the airport has the potential to serve economic development and tourism to the benefit of businesses in Portola.

Policies: Airport

- C-P-38:** Encourage expansion of flight services and accommodations at Beckwourth Airport.

Implementation: Airport

- C-I-57:** Cooperate with Plumas County in their efforts to expand services and aircraft accommodations at Beckwourth Airport.
- C-I-58:** Provide supporting letters and other documents as requested by the County in support of airport expansion.
- C-I-59:** Provide information, such as brochures and signs, and ensure that current telephone directory information regarding Portola businesses is available at the airport.
- C-I-60:** Encourage development of courtesy van service and other means of ground transportation for people arriving by general aviation aircraft.